

GTAS July Monthly Report

In July technical development continued on the server and client software. Also, the system deployment in Texas was completed including another software upgrade installation, training, and collaboration demonstrations between users including simulated toxic releases.

Technical Development

We continued integration of the Texas localization software builds. Testing found a bug with multi-users on the client that was fixed. We also found problems with street labeling on the multiplex scale that was fixed. A bug was found that caused files to accumulate on the server filing directories to capacity and thus prohibiting new data to load on the server. A new purging scheme was developed and implemented. We also setup developer accounts on the GTAS development machine for Air Resources Laboratory (ARL) toxic plume developers.

We ordered:

- New GTAS data server and backup server for GSD
- New GTAS data servers for remaining Region office deployments

We developed the capability to display multiple simultaneous toxic plume releases within the GTAS domain. All Texas radar data was added to the server/client. Based on WFO forecaster and EOC input we changed high-resolution radar color tables to depict high-level reflectivities (heaviest rain/hail precipitation) in hottest (brightest) colors.

We developed a configuration management system to store shape files for Texas, Washington, Kansas City and New York domains. An additional CM system was developed to track software changes, manage bug fixes and track server/client software version releases.

Some high-resolution street level shape files can be large data sets that take longer to load. We added an animated icon on the client display to indicate “file loading” to the user. We also changed some labeling on certain map backgrounds that have the same names – continuous roads with the name shown multiple times - to declutter the display. Additionally, we added options to the shapefile display properties so that the user may configure each city scale street level map background labeling characteristics... font type/size, color, bold/italic, etc.

Currently the toxic plume model is initialized from the North American Model 12-km forecast grids. The 2-km high-resolution model is now running on GSD high performance computer. The output file still needs to be converted to GRIB format before being ingested into the GTAS server(s).

Lastly we began conducting operational support for both the Texas deployment and for our own development and operational backup servers in GSD. This consists of “pinging” each server every morning and continual monitoring by GSD operations support staff.

Management and Coordination

The June Monthly Report, Project Plan and EVM reports were updated and added to the GTAS web site. We conducted familiarization training for both the FT Worth WFO and the Dallas EOC on the most recent GTAS software release. Additional training was conducted onsite for FT Worth WFO forecasters and Dallas EOC staff. This took two days of several GTAS staff to be on site to cover day/evening personnel shifts and functional collaboration training between sites.

The Texas State EOC has been contacted again to arrange GTAS client installation in their facility. No date has been set yet.

Lastly we contacted the Seattle WFO to begin to address data domains over Washington State, Canada, and the eastern Pacific.